IMPROVEMENTS OF ANGANAWADI BUILDING AND CONSTRUCTION OF GOVERNMENT SCHOOL BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION

EMB

First and Final Bill

Pre-Measurement Sheet

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: IMPROVEMENTS OF ANGANAWADI BUILDING AND CONSTRUCTION OF GOVERNMENT SCHOOL BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION

PREMEASUREMENT SHEET

First & Final Bill

Client	**Sri T S Kothanda Raju(Proprietor R K CONSTRUCTIONS, Proprietor SHREE CHARAN CONSTRUCTIONS)No:05, Sree Sri Nivas Bagath Enclave, Kattigenahalli village, Yelahanka post, Bangalore-560064**

Chainage in m		Description of Item	Unit	No	L	B	D	Qty	Remarks
From	To								
Item No 1		KSRRB M200-12.3. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. C. Prestressed / Reinforced cement concrete grade M-20 & above. MORTH Specification No. 202.(Pg No 139 ,Item No 18.19)							
Measurements taken on		01-03-2021							
		Ground floor							
		Footing(C1)	Cum	28	2	2	0.6	67.20	
		C2	Cum	11	1.5	1.5	0.45	11.14	
		Plinth Beam							
		Along long direction	Cum	2	34.45	0.3	0.45	9.30	
			Cum	9	5.5	0.3	0.45	6.68	
		Along corridor	Cum	1	31.65	0.3	0.45	4.27	
		Along short direction	Cum	2	21	0.3	0.45	5.67	
			Cum	5	5.5	0.3	0.45	3.71	
		Along corridor	Cum	1	21	0.3	0.45	2.84	
		Along long direction							
		Slab	cum	1	31.65	5.50	0.15	26.11	
		Columns(C1)	cum	14	0.60	0.30	4.05	10.21	
		C2	cum	7	0.45	0.30	4.20	3.97	
		Beams Shorter	cum	7	5.50	0.30	0.30	3.47	
		Beams Longer	cum	2	29.55	0.30	0.30	5.32	
		Corridor beam	cum	1	28.98	0.30	0.30	2.61	
		Along short direction							
		Slab	cum	1	26.5	5.8	0.15	21.86	
		Columns(C1)	cum	14	0.6	0.30	4.05	10.21	
		C2	cum	4	0.45	0.30	4.20	2.27	
		Beams Shorter	cum	5	5.5	0.30	0.3	2.48	

Contractor | PMC | Assistant Engineer 12.2.2021 | Assistant Executive Engineer

Chainage in m		Description of Item	Unit	No	L	B	D	Qty	Remarks
		Beams Longer	cum	2	24.4	0.30	0.3	4.39	
		Corridor beam	cum	1	19.5	0.30	0.3	1.76	
		Staircase(Flight)	cum	2	3.75	1.50	0.15	1.69	
		Landing	cum	1	3.15	1.00	0.15	0.47	
		Deduction							
		Staircase	Cum	-1	4	3.15	0.15	-1.89	
							Total Executed Quantity	205.72	
							Qty Carried to Summary	205.72	

Contractor PMC Assistant Engineer 13.2.2021 Assistant Executive Engineer

Chainage in m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 4	Dismantling plastering and removing the debris with a lead upto 200m.							
Measurements taken on	13-02-2021							
	Internal plastering							
	Ground Floor							
	Class room							
	Along long direction	Sqm	20	5		3.45	345.00	
	Along short direction	Sqm	20	4		3.45	276.00	
	Toilet							
	Along long direction	Sqm	2	5		3.45	34.50	
	Along short direction	Sqm	2	4		3.45	27.60	
	Staircase wall	Sqm	2	4		3.45	27.60	
	Deduction							
	D1	Sqm	-11	1.2		2.1	-27.72	
	W1	Sqm	-20	1.5		1.5	-45.00	
	V	Sqm	-5	0.6		0.75	-2.25	
						Total Executed Quantity	635.73	
						Qty Carried to Summary	635.73	

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Contractor PMC Assistant Engineer Assistant Executive Engineer

Dimensions in m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 06	Excavation 1.5m and above in width in hard rock by chiselling and / or wedging, where blasting is prohibited for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5 m. in depth stacking the excavated stuff clear from the edge of excavation with lead upto 50m including cost of labour as per specifications. complete as per specifications and directions of Engineer in charge.							
Measurements taken on	22-03-2021							
	Footings							
	C1	Cum	12	3.3	3.3	1.5	196.02	
	C2	Cum	16	2.7	2.7	1.5	174.96	
	CF1	Cum	1	5.38	3.5	1.5	28.22	
	CF2	Cum	1	4.3	3.1	1.5	20.00	
	SSM Footing							
	Along Long Direction	Cum	1	10	0.9	0.9	8.10	
		Cum	1	4.8	0.9	0.9	3.89	
		Cum	3	2.45	0.9	0.9	5.95	
		Cum	1	2.75	0.9	0.9	2.23	
	Along Short Direction	Cum	1	6.25	0.9	0.9	5.06	
		Cum	1	6.60	0.9	0.9	5.35	
		Cum	8	2.45	0.9	0.9	15.88	
		Cum	1	2.75	0.9	0.9	2.23	
						Total Executed Quantity	467.87	
						Qty Carried to Summary	467.87	

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Contractor PMC Assistant Engineer Assistant Executive Engineer

Chainage in m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 08	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications and directions of Engineer in charge.							
Measurements taken on	28-03-2021							
	Footings							
	C1	Cum	12	3.3	3.3	0.15	19.60	
	C2	Cum	16	2.7	2.7	0.15	17.50	
	CF1	Cum	1	5.38	3.5	0.15	2.82	
	CF2	Cum	1	4.3	3.1	0.15	2.00	
	SSM Footing							
	Along Long Direction	Cum	1	34.3	0.9	0.15	4.63	
		Cum	1	32.5	0.9	0.15	4.39	
		Cum	3	5	0.9	0.15	2.03	
		Cum	1	5	0.9	0.15	0.68	
		Cum	6	1.2	0.9	0.15	0.97	
	Along Short Direction	Cum	1	19.03	0.9	0.15	2.57	
		Cum	1	35.2	0.9	0.15	4.75	
		Cum	8	5	0.9	0.15	5.40	
		Cum	1	5	0.9	0.15	0.68	
		Cum	1	2.9	0.9	0.15	0.39	
		Cum	1	2.55	0.9	0.15	0.34	
						Total Executed Quantity	68.74	
						Qty Carried to Summary	68.74	

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Contractor PMC Assistant Engineer Assistant Executive Engineer

Change in m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 13	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications and directions							
Measurements taken on	12-04-2021							
	Footings							
	C1	Sqm	12	13.2		0.65	102.96	
	C2	Sqm	16	10.8		0.5	86.4	
	CF1	Sqm	1	17.76		0.35	6.22	
	Beam	Sqm	1	12.26		0.4	4.90	
	CF2	Sqm	1	14.8		0.3	4.44	
	Beam	Sqm	1	9.8		0.3	2.94	
						Total Executed Quantity	**207.86**	
						Qty Carried to Summary	**207.86**	

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Assistant Engineer

Assistant Executive Engineer

Contractor

m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 15	Providing and removing centering, shuttering, strutting, propping etc. and Removal of form Work for columns, pillars, piers, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specifications and directions of Engineer in charge.							
Measurements taken on	20-04-2021, 10-05-2021, 05-06-2021							
	Column(below plinth beam)							
	C1	Sqm	12	1.5		0.65	11.70	
	C2	Sqm	16	1.5		0.8	19.20	
	CF1	Sqm						
	C1	Sqm	2	1.5		0.55	1.65	
	CF2	Sqm						
	C2	Sqm	2	1.5		0.7	2.10	
	Ground Floor							
	Column upto beam bottom							
	C1	Sqm	14	1.5		3.15	66.15	
	C2	Sqm	18	1.5		3.15	85.05	
	First Floor							
	Column upto beam bottom							
	C1	Sqm	7	1.5		3.15	33.08	
	C2	Sqm	7	1.5		3.15	33.08	
						Total Executed Quantity	**252.00**	
						Qty Carried to Summary	**252.00**	

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Assistant Engineer

Assistant Executive Engineer

Chainage in m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 17	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications and directions of Engineer in charge.							
Measurements taken on	26-05-2021 26-06-2021							
	Ground Floor							
	Slab(along short direction)sides	Sqm	1	58.6		0.15	8.79	
	Slab(along long direction)sides	Sqm	1	76.2		0.15	11.43	
	First Floor							
	Slab(along short direction)sides	Sqm	1	58.6		0.15	8.79	
	Total Executed Quantity						29.01	
	Qty Carried to Summary						29.01	

Assistant Engineer

Assistant Executive Engineer

Contractor PMC

m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 20	Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications and directions of Engineer in charge.							
Measurements taken on	15-04-2021, 26-04-2021, 06-05-2021							
	Footings							
	C1	Cum	12	3.3	3.3	0.65	84.94	
	C2	Cum	16	2.7	2.7	0.5	58.32	
	CF1	Cum	1	5.38	3.50	0.35	6.59	
	Beam	Cum	1	5.38	0.75	0.4	1.61	
	CF2	Cum	1	4.3	3.1	0.3	4.00	
	Beam	Cum	1	4.3	0.6	0.3	0.77	
	Column(below plinth beam)							
	C1	Cum	12	0.45	0.3	0.65	1.05	
	C2	Cum	16	0.45	0.3	0.8	1.73	
	CF1							
	C1	Cum	2	0.45	0.3	0.55	0.15	
	CF2							
	C2	Cum	2	0.45	0.3	0.7	0.18	
	Plinth beam							
	Along long direction	Cum	2	38.1	0.2	0.45	6.86	
		Cum	5	5.9	0.2	0.45	2.66	
	Along Short direction	Cum	9	5.5	0.2	0.45	4.46	
		Cum	2	20.4	0.2	0.45	3.67	
						Total Executed Quantity	**177.00**	
						Qty Carried to Summary	**177.00**	

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ಪಿ.ಐ.ಬಿ. ಬೆಂಗಳೂರು-106

Assistant Engineer

Assistant Executive Engineer

Project name	**IMPROVEMENTS OF ANGANAWADI BUILDING AND CONSTRUCTION OF GOVERNMENT SCHOOL BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION**
Client	**Sri T S Kothanda Raju(Proprietor R K CONSTRUCTIONS, Proprietor SHREE CHARAN CONSTRUCTIONS)No:05, Sree Sri Nivas Bagath Enclave, Kattigenahalli village, Yelahanka post, Bangalore-560064**
Description	**Steel calculation sheet**

PREMEASUREMENT SHEET

First & Final Bill

Chainage		Description	Nos	BAR DIA	No. Bars	Total No. bars	L	Crank length (42d)	Actual Length	Total Length	Weight	Total weight
				mm			m	m	m	m	kg/m	Kg's
From	To											
Item no. 23(a)		Providing T M T bars Fe 500 steel reinforcement for R.C C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of Engineer in charge. Ground Floor										
Measurements taken on		08-04-2021, 06-05-2021, 30-04-2021, 16-04-21, 25-05-21										

Footings										
C1										
Bars Along Long Direction	12	25	20	240	3.30	0.0	3.30	792.00	3.85	3051.86
Bars Along Short Direction	12	25	20	240	3.30	0.0	3.30	792.00	3.85	3051.86
C2										
Bars Along Long Direction	16	25	16	256	2.70	0.0	2.70	691.20	3.85	2663.44
Bars Along Short Direction	16	25	16	256	2.70	0.0	2.70	691.20	3.85	2663.44
CF1										
CF1 BEAM	1									
Top Bars		25	8	8	6.88	0.00	6.88	55.04	3.85	212.04
Bottom Bars		25	16	16	5.38	0.00	5.38	86.08	3.85	331.70
Stirrups 4 lgd #12 @ 100c/c	1	12	55	55	5.25	0.00	5.25	287.70	0.89	255.42
Slab										
Main Bars	1	20	46	46	3.50	0.00	3.50	161.00	2.47	397.67
Distribution	1	12	19	19	5.38	0.00	5.38	102.22	0.89	90.75
CF2										
CF2 BEAM	1									
Top Bars		25	6	6	5.50	0.00	5.50	33.00	3.85	127.05
Bottom Bars		25	8	8	4.30	0.00	4.30	34.40	3.85	132.44
Stirrups 4 lgd #12 @ 100c/c		12	44	44	5.25	0.00	5.25	231.00	0.89	205.09
Slab										
Main Bars	1	20	47	47	3.10	0.00	3.10	145.70	2.47	359.52
Distribution	1	12	14	14	5.50	0.00	5.50	77.00	0.89	68.36
								Sub Total		**13610.10**

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

Project name	BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION
Client	Sri T S Kothanda Raju(Proprietor R K CONSTRUCTIONS, Proprietor SHREE CHARAN CONSTRUCTIONS)No:05, Sree Sri Nivas Bagath Enclave, Kattigenahalli village, Yelahanka post, Bangalore-560064
Description	Steel calculation sheet

PREMEASUREMENT SHEET

First & Final Bill

Chainage From	Chainage To	Description	Nos	BAR DIA	No. Bars	Total No. bars	L	Crank length (42d)	Actual Length	Total Length	Weight	Total weight
				mm			m	m	m	m	kg/m	Kg's
		B3 b/w 3 & 11	9									
		top bars		25	3	27	8 40	0 00	8 40	226 80	3 85	873 94
		top extra bar	1	25	3	27	3 40	0 00	3 40	91 80	3 85	353 74
		bottom bars		25	4	36	7 50	0 00	7 50	270 00	3 85	1040 41
		bottom extra bar	1	25	2	18	3 85	0 00	3 85	69 30	3 85	267 04
		2L-#8mm @150c/cstirrups		8	36	327	1 50	0 00	1 50	490 50	0 39	193 54
		2L-#8mm @100c/c stirrups		8	35	315	1 50	0 00	1 50	472 50	0 39	186 44
		B4	1									
		top bars		20	2	2	9 88	0 00	9 88	19 75	2 47	48 71
		top extra bar	1	25	5	5	3 15	0 00	3 15	15 75	3 85	60 69
		bottom bars		25	3	3	6 05	0 00	6 05	18 15	3 85	69 94
		bottom bars		25	4	4	4 13	0 00	4 13	16 50	3 85	63 58
		bottom extra bar	1	25	2	2	3 85	0 00	3 85	7 70	3 85	29 67
		2L-#8mm @150c/cstirrups		8	22	22	1 50	0 00	1 50	33 00	0 39	13 02
		2L-#8mm @250c/cstirrups		8	14	14	1 50	0 00	1 50	21 15	0 39	8 35
		2L-#8mm @250c/cstirrups		8	9	9	1 50	0 00	1 50	12 90	0 39	5 09
											Sub Total	7542.07
		Roof Slab										
		Slab b/w 3-11										
		10# @100 c/c main bars alt	1	10	38	38	29 00	0 00	29 00	1087 50	0 62	670.45
		10# @100 c/c crank bars alt	1	10	38	38	29 00	1 68	30 68	1150 50	0 62	709 33
		10# @200 c/c distribution	1	10	145	145	7 50	0 00	7 50	1087 50	0 62	670.45
		12# @ 200 C/C EXTRA at top	1	12	39	39	15 40	0 00	15 40	592 90	0 89	526 38
		Slab b/w A-F										
		10# @100 c/c crank bars alt	1	10	36	36	14 30	0 00	14 30	507 65	0 62	312 99
		10# @100 c/c crank bars alt	1	10	36	36	14 30	1 68	15 98	567 29	0 62	349 76
		10# @200 c/c distribution bars alt	1	10	72	72	7 10	0 00	7 10	507 65	0 62	312 99
		12# @ 200 C/C EXTRA at top	1	12	36	36	7 70	0 00	7 70	273 35	0 89	242 68

ASSISTANT EXECUTIVE ENGINEER

Chainage in m	Description of Item	Unit	No	L	B	D	Qty	Remarks
Item No 23(b)	Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of Engineer in charge.First Floor							
Measurements taken on	02-06-2021, 21-06-21, 23-06-21							
	Column	tonne		From Steel Calculation			1.72	
	Beam	tonne		From Steel Calculation			3.46	
	Roof Slab	tonne		From Steel Calculation			2.31	
				Total Executed Quantity			7.49	
				Qty Carried to Summary			7.49	

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Assistant Engineer

Assistant Executive Engineer

Project name	**IMPROVEMENTS OF ANGANAWADI BUILDING AND CONSTRUCTION OF GOVERNMENT SCHOOL BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION**
Client	**Sri T S Kothanda Raju(Proprietor R K CONSTRUCTIONS, Proprietor SHREE CHARAN CONSTRUCTIONS)No:05, Sree Sri Nivas Bagath Enclave, Kattigenahalli village, Yelahanka post, Bangalore-560064**
Description	**Steel calculation sheet**

PREMEASUREMENT SHEET

First & Final Bill

Chainage		Description	Nos	BAR DIA	No. Bars	Total No. bars	L	Crank length (42d)	Actual Length	Total Length	Weight	Total weight
				mm			m	m	m	m	kg/m	Kg's
From	To											
Item no. 23(b)		Providing T M T bars Fe 500 steel reinforcement for R C C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of Engineer in charge First Floor										
Measurements taken on		02-06-21, 21-06-21, 23-06-21										
		Column										
		C2	7	25	4	28	3.60	0.00	3.60	100.80	3.85	388.42
		C2	7	20	4	28	3.60	0.00	3.60	100.80	2.47	248.59
		Rectangle Rings @ 250 c/c		8	14	101	1.28	0.00	1.28	128.52	0.39	50.71
		Rectangle Rings @ 250 c/c		8	14	101	1.28	0.00	1.28	128.52	0.39	50.71
		C1	7	25	8	56	3.60	0.00	3.60	201.60	3.85	776.84
		Rectangle Rings @ 250 c/c		8	14	202	1.28	0.00	1.28	257.04	0.39	101.42
		Rectangle Rings @ 250 c/c		8	14	202	1.28	0.00	1.28	257.04	0.39	101.42
											Sub Total	**1718.12**
		Beam										
		B1	3									
		top bars		20	2	6	6.80	0.00	6.80	40.80	2.47	100.62
		bottom bars		25	3	9	5.90	0.00	5.90	53.10	3.85	204.61
		bottom extra bars		25	3	9	4.00	0.00	4.00	36.00	3.85	138.72
		2L-#8mm @130c/cstirrups		8	91	272	1.50	0.00	1.50	408.46	0.39	161.17
		B2 b/w F-A	2									
		top bars		20	2	4	17.10	0.00	17.10	68.40	2.47	168.68
		bottom bars		25	2	4	16.20	0.00	16.20	64.80	3.85	249.70
		2L-#8mm @150c/c stirrups		8	114	228	1.30	0.00	1.30	296.40	0.39	116.95
		B2 b/w 3&11	1									
		top bars		20	2	2	33.35	0.00	33.35	66.70	2.47	164.49
		bottom bars		25	2	2	32.45	0.00	32.45	64.90	3.85	249.68
		2L-#8mm @150c/cstirrups		8	222	222	1.30	0.00	1.30	289.03	0.39	114.06
		B3 b/w 1 & 2	4									
		top bars		25	3	12	8.10	0.00	8.10	97.20	3.85	374.55
		top extra bar	1	25	3	12	3.40	0.00	3.40	40.80	3.85	157.22
		bottom bars		25	4	16	7.20	0.00	7.20	115.20	3.85	443.91
		bottom extra bar	1	25	2	8	3.85	0.00	3.85	30.80	3.85	118.68
		2L-#8mm @150c/cstirrups		8	36	145	1.50	0.00	1.50	218.00	0.39	86.02
		2L-#8mm @100c/cstirrups		8	18	70	1.50	0.00	1.50	105.00	0.39	41.45
		B3 b/w 1 & 2	1									
		top bars		25	3	3	6.35	0.00	6.35	19.05	3.85	73.41
		top extra bar	1	25	3	3	3.40	0.00	3.40	10.20	3.85	39.30
		bottom bars		25	4	4	5.45	0.00	5.45	21.80	3.85	84.00

ASSISTANT EXECUTIVE ENGINEER

Project name	BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION
Client	Sri T S Kothanda Raju(Proprietor R K CONSTRUCTIONS, Proprietor SHREE CHARAN CONSTRUCTIONS)No:05, Sree Sri Nivas Bagath Enclave, Kattigenahalli village, Yelahanka post, Bangalore-560064
Description	Steel calculation sheet

PREMEASUREMENT SHEET

First & Final Bill

Chainage From	Chainage To	Description	Nos	BAR DIA	No. Bars	Total No. bars	L	Crank length (42d)	Actual Length	Total Length	Weight	Total weight
				mm			m	m	m	m	kg/m	Kg's
		bottom extra bar	1	25	2	2	3 85	0 00	3 85	7 70	3 85	29 67
		2L-#8mm @150c/cstirrups		8	36	36	1 50	0 00	1 50	54 50	0 39	21 50
		2L-#8mm @100c/cstirrups		8	18	18	1 50	0 00	1 50	26 25	0 39	10 36
		B4	1									
		top bars		20	2	2	9 88	0 00	9 88	19 75	2 47	48 71
		top extra bar	1	25	5	5	3 15	0 00	3 15	15 75	3 85	60 69
		bottom bars		25	3	3	6 05	0 00	6 05	18 15	3 85	69 94
		bottom bars		25	4	4	4 13	1 00	5 13	20 50	3 85	78 99
		bottom extra bar	1	20	2	2	3 85	0 00	3 85	7 70	2 47	18 99
		2L-#8mm @100c/cstirrups		8	33	33	1 50	0 00	1 50	49 50	0 39	19 55
		2L-#8mm @200c/cstirrups		8	18	18	1 50	0 00	1 50	26 44	0 39	10 43
		2L-#8mm @200c/cstirrups		8	11	11	1 50	0 00	1 50	16 13	0 39	6 36
										Sub Total		3462.78
		Slab										
		Slab b/w E-F										
		10# @100 c/c crank bars alt	1	10	30	30	1 60	0 00	1 60	47 20	0.62	29 10
		10# @100 c/c crank bars alt	1	10	30	30	1 60	1 68	3 28	96 76	0 62	59 66
		10# @200 c/c distribution bars alt	1	10	8	8	5 90	0 00	5 90	47 20	0 62	29 10
		12# @ 200 C/C EXTRA at top	1	12	8	8	1 00	0 00	1 00	8 00	0 89	7 10
		Slab b/w A-F										
		10# @100 c/c crank bars alt	1	10	36	36	14 30	0 00	14 30	507 65	0 62	312 99
		10# @100 c/c crank bars alt	1	10	36	36	14 30	1 68	15 98	567 29	0 62	349 76
		10# @200 c/c distribution bars alt	1	10	72	72	7 10	0 00	7 10	507 65	0 62	312 99
		12# @ 200 C/C EXTRA at top	1	12	36	36	7 70	0 00	7 70	273 35	0 89	242 68
		Slab b/w G-F										
		12# @100 c/c crank bars alt	1	12	30	30	5 83	0 00	5 83	171 84	0 89	152 56
		12# @100 c/c crank bars alt	1	12	30	30	5 83	2 02	7 84	231 31	0 89	205 36
		12# @100 c/c crank bars alt	1	12	58	58	5 90	0 00	5 90	343 68	0 89	305 12
		12# @100 c/c crank bars alt	1	12	58	58	5 90	0 00	5 90	343 68	0.89	305 12
										Sub Total		2311.53
										Total Steel quantity in kg		7492.43
										Total Steel Quantity in tonne		7.49

ASSISTANT EXECUTIVE ENGINEER

IMPROVEMENTS OF ANGANAWADI BUILDING AND CONSTRUCTION OF GOVERNMENT SCHOOL BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION

EMB

First and Final Bill

Measurement Sheet

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: IMPROVEMENTS OF ANGANAWADI BUILDING AND CONSTRUCTION OF GOVERNMENT SCHOOL BUILDINGS AT ATTUR VILLAGE IN WARD NO.03 OF YELAHANKA SATELLITE TOWN SUB DIVISION

MEASUREMENT SHEET

First & Final Bill

Client	Sri T S Kothanda Raju(Proprietor R K CONSTRUCTIONS, Proprietor SHREE CHARAN CONSTRUCTIONS)No:05, Sree Sri Nivas Bagath Enclave, Kattigenahalli village, Yelahanka post, Bangalore-560064

Chainage in m		Description of Item	Unit	No	Length (m)	Breadt (m)	Depth (m)	Quanti ty	Rate Rs	Amount Rs	Remarks
From	To										
Item No 1		KSRRB M200-12.3. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. C. Prestressed / Reinforced cement concrete grade M-20 & above. MORTH Specification No. 202.(Pg No 139 ,Item No 18.19)									
			Cum								
		Vide Total executed Quantity from premeasurement Page no. 01						**205.72**			
		Total Executed Quantity						**205.72**			
		Schedule B Quantity						**205.72**			
		Now To be Paid Qty						**205.72**	**1844.83**	**379511.05**	
Item No 2		KSRRB M200-14.2.Dismantling of existing structures like culverts,bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherevernecessary, sorting the dismantled material, disposal of unserviceablematerial and stacking the serviceable material with all lifts complete asper specifications Dismantling brick/Tile work B. In cement mortar. Pg No.139 Item No.18.23									
			Cum								
		Vide Total executed Quantity from premeasurement Page no. 03						**77.40**			
		Total Executed Quantity						**77.40**			
		Schedule B Quantity						**77.40**			
		Now To be Paid Qty						**77.40**	**407.51**	**31539.44**	

ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಜ.ಎಂ.ಪಾ. ಬೆಂಗಳೂರು-560106

Assistant Executive Engineer

Chainage in m		Description of Item	Unit	No	Length (m)	Breadt (m)	Depth (m)	Quanti ty	Rate Rs	Amount Rs	Remarks
From	To										
Item No 3		Dismantling cement concrete flooring or plain cement concrete work including removing and conveying the debris to distance upto 200m (within average thickness of 15 cms) No. KBS Pg No 270 ,Item No 37.51,									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 04						**319.30**			
							Total Executed Quantity	**319.30**			
							Schedule B Quantity	**319.30**			
							Now To be Paid Qty	**319.30**	**99.85**	**31882.11**	
Item No 4		Dismantling plastering and removing the debris with a lead upto 200m.									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 05						**635.73**			
							Total Executed Quantity	**635.73**			
							Schedule B Quantity	**635.73**			
							Now To be Paid Qty	**635.73**	**42.96**	**27310.96**	
Item No 5		Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer-in-charge.									
			Cum								
		Vide Total executed Quantity from premeasurement Page no. 06						**343.72**			
							Total Executed Quantity	**343.72**			
							Schedule B Quantity	**343.72**			
							Now To be Paid Qty	**343.72**	**72.22**	**24823.54**	
Item No 06		Excavation 1.5m and above in width in hard rock by chiselling and / or wedging, where blasting is prohibited for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5 m. in depth stacking the excavated stuff clear from the edge of excavation with lead upto 50m including cost of labour as per specifications. complete as per specifications and directions of Engineer in charge.									
			Cum								
		Vide Total executed Quantity from premeasurement Page no. 07						**467.87**			
							Total Executed Quantity	**467.87**			
							Schedule B Quantity	**467.87**			
							Now To be Paid Qty	**467.87**	**2370.76**	**1109218.742**	

Assistant Engineer

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ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
Assistant Executive Engineer
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-06

Chainage in m		Description of Item	Unit	No	Length (m)	Breadt (m)	Depth (m)	Quantity	Rate Rs	Amount Rs	Remarks
From	To										
Item No 11		Filling available excavated earth(excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications and directions of Engineer in charge.									
			Cum								
		Vide Total executed Quantity from premeasurement Page no. 12						**157.40**			
		Total Executed Quantity						**157.40**			
		Schedule B Quantity						**157.40**			
		Now To be Paid Qty						**157.40**	**233.36**	**36729.73**	
Item No 12		Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per specifications and directions of Engineer in charge.									
			Cum								
		Vide Total executed Quantity from premeasurement Page no. 13						**310.48**			
		Total Executed Quantity						**310.48**			
		Schedule B Quantity						**310.48**			
		Now To be Paid Qty						**310.48**	**72.12**	**22391.79**	
Item No 13		Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications and directions of Engineer in charge.									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 14						**207.86**			
		Total Executed Quantity						**207.86**			
		Schedule B Quantity						**207.86**			
		Now To be Paid Qty						**207.86**	**299.54**	**62262.38**	
Item No 14		Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness , including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications and directions of Engineer in									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 15						**176.40**			
		Total Executed Quantity						**176.40**			
		Schedule B Quantity						**176.40**			
		Now To be Paid Qty						**176.40**	**415.64**	**73318.90**	
Item No 15		Providing and removing centering, shuttering, strutting, propping etc. and Removal of form Work for columns, pillars, piers, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specifications and directions of Engineer in charge.									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 16						**252.00**			
		Total Executed Quantity						**252.00**			
		Schedule B Quantity						**252.00**			
		Now To be Paid Qty						**252.00**	**529.42**	**133413.84**	

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ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬೆಂಗಳೂರು-56
Assistant Executive Engineer

Chainage in m		Description of Item	Unit	No	Length (m)	Breadt (m)	Depth (m)	Quantity	Rate Rs	Amount Rs	Remarks
From	To										
Item No 16		Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for suspended floors, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specificaitons for heights more than 3.50m from ground level. - 0 to 5 mtrs. complete as per specifications and directions of Engineer in charge.									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 17						**548.69**			
							Total Executed Quantity	**548.69**			
							Schedule B Quantity	**548.69**			
							Now To be Paid Qty	**548.69**	**464.40**	**254809.31**	
Item No 17		Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications and directions of Engineer in charge.									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 18						**29.01**			
							Total Executed Quantity	**29.01**			
							Schedule B Quantity	**29.01**			
							Now To be Paid Qty	**29.01**	**876.56**	**25429.01**	
Item No 18		Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specifications and directions of Engineer in charge.									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 19						**216.24**			
							Total Executed Quantity	**216.24**			
							Schedule B Quantity	**216.24**			
							Now To be Paid Qty	**216.24**	**339.01**	**73307.52**	
Item No 19		Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for Stairs (excluding landing) except spiral staircase including cost of all materials, labour complete as per specifications and directions of Engineer in charge.									
			Sqm								
		Vide Total executed Quantity from premeasurement Page no. 20						**53.65**			
							Total Executed Quantity	**53.65**			
							Schedule B Quantity	**53.65**			
							Now To be Paid Qty	**53.65**	**603.72**	**32388.97**	

Contractor

PMC

Assistant Engineer

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಬೆಂಗಳೂರು-106
Assistant Executive Engineer

Chainage in m		Description of Item	Unit	No	Length (m)	Breadt (m)	Depth (m)	Quantity	Rate Rs	Amount Rs	Remarks
From	To										
Item No 20		Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications and directions of Engineer in charge.									
			Cum								
		Vide Total executed Quantity from premeasurement Page no. 21						177.00			
		Total Executed Quantity						177.00			
		Schedule B Quantity						177.00			
		Now To be Paid Qty						177.00	6747.73	1194334.71	
Item No 21(a)		Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregtes @ 0.47cum,with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (an thivck ness) including attached plasters ,columns, pillars,posts,struts.butters,string or lacing courses ,parapets,coping,bed blocks,anchor blocks ,plain window cills,fillets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications and directions of Engineer in charge.									
Measurements taken on											
		Ground Floor									
		Column upto beam bottom									
		C1	Cum	14	0.45	0.3	3.15	5.95			
		C2	Cum	18	0.45	0.3	3.15	7.65			
		Stair case									
		Waist slab(Flight 1)	Cum	1	4.09	1.6	0.15	0.92			
		Waist slab(Flight 2)	Cum	1	3.75	1.5	0.15	0.84			
		Landing	Cum	1	3.15	1.5	0.15	0.71			
		Riser and treads	Cum	24	1.5		0.023	0.81			
					Triangular area =0.5*0.3*0.15=0.023						
		SB1	Cum	1	3.15	0.20	0.30	0.19			
		Total Executed Quantity						17.08			
		Schedule B Quantity						17.08			
		Now To be Paid Qty						17.08	7018.25	119869.96	

24/7/2024

Contractor

Assistant Engineer

Assistant Executive Engineer

Item No 21(b)	Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregtes @ 0.47cum,with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (an thivck ness) including attached plasters ,columns, pillars,posts,struts.butters,string or lacing courses ,parapets,coping,bed blocks,anchor blocks ,plain window cills,fillets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications and directions of Engineer in charge.										
Measurements taken on											
	First Floor										
	Column upto beam bottom										
	C1	Cum	7	0.45	0.3	3.15	2.98				
	C2	Cum	7	0.45	0.3	3.15	2.98				
							Total Executed Quantity	**5.95**			
							Schedule B Quantity	**5.95**			
							Now To be Paid Qty	**5.95**	**7087.97**	**42198.23**	
Item No 22	Providing and laying cement concrete using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for R.C.C works laid in 15 cms thick layers and well compacted including vibrating, curing, etc for all super Structure works with all lead and Lift etc., complete (exclusive of cost of steel and fabrication charges) Ready mixed cement for concrete with M-25. complete as per specifications and directions of Engineer in charge.										
Measurements taken on											
	Ground Floor										
	Slab(along shorter direction)	Cum	1	21.8	7.5	0.15	24.53				
	Slab(along long direction)	Cum	1	30.6	7.5	0.15	34.43				
	Deductions										
	Stair case	Cum	-1	4.9	3.15	0.15	-2.32				
	Beams										
	Along long direction										
	B1	Cum	1	5.4	0.3	0.3	0.53				
	B2	Cum	2	29	0.2	0.3	3.48				
	B3	Cum	5	7.5	0.2	0.3	2.25				

Contractor

Assistant Engineer

Assistant Executive Engineer

	B4	Cum	1	9.05	0.3	0.3	0.81			
	Corridor beam(B2)	Cum	1	30.8	0.3	0.3	2.77			
	Along Short direction									
	B3	Cum	9	6.8	0.8	0.3	5.58			
	B2	Cum	2	19.7	0.3	0.3	3.55			
	Corridor beam(B2)	Cum	1	12.9	0.3	0.3	1.16			
	First Floor									
	Slab(along shorter direction)	Cum	1	21.8	7.5	0.15	24.53			
	Deductions									
	Stair case	Cum	-1	4.9	1.2	0.18	-0.88			
	Beams									
	Along long direction									
	B1	Cum	1	5.9	0.3	0.3	0.53			
	B3	Cum	5	7.5	0.2	0.3	2.25			
	B4	Cum	1	9.05	0.3	0.3	0.81			
	Along Short									
	B2	Cum	2	19.7	0.2	0.3	2.36			
	Corridor	Cum	1	12.9	0.2	0.3	0.77			
						Total Executed Quantity	**107.15**			
						Schedule B Quantity	**107.15**			
						Now To be Paid Qty	**107.15**	6382.02	683863.76	

CAFC

Contractor

Assistant Engineer

Assistant Executive Engineer

Chainage in m		Description of Item	Unit	No	Length (m)	Breadt (m)	Depth (m)	Quanti ty	Rate Rs	Amount Rs	Remarks
From	To										
Item No 23(a)		Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of Engineer in charge.Ground Floor									
			tonne								
		Vide Total executed Quantity from premeasurement Page no. 22						37.26			
		Total Executed Quantity						**37.26**			
		Schedule B Quantity						**37.37**			
		Now To be Paid Qty						**37.26**	**90566.17**	**3374764.536**	
Item No 23(b)		Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of Engineer in charge.First Floor									
			tonne								
		Vide Total executed Quantity from premeasurement Page no. 23						7.49			
		Total Executed Quantity						**7.49**			
		Schedule B Quantity						**5.67**			
		Now To be Paid Qty									
		Quantity limited to						**5.67**	**91434.56**	**518433.96**	
Item No 24		KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) complete as per specifications and directions of Engineer in charge.									
Measurements taken on											
		Along Longer	Cum	1	27.40	4.5	0.45	55.49			
		Along Shorter	Cum	1	13.00	5.3	0.45	31.01			
		Total Executed Quantity						**86.49**			
		Schedule B Quantity						**86.49**			
		Now To be Paid Qty						**86.49**	**377.30**	**32632.677**	
									Total amount	**9406722.41**	
									GST Charges (12% of estimated cost)	**1128806.69**	
									Grand Total	**10535529.10**	

Contractor

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ಯಲ್ಲಾಪುರ ಉಪವಿಭಾಗ
Assistant Executive Engineer